

THAT WHICH IS CLAIMED:

1. A method for treating an immune system disorder in a subject in need of such treatment, comprising administering to said subject a compound selected from the group consisting of:

- (a) A<sub>1</sub> adenosine receptor antagonists;
- (b) P<sub>2X</sub> purinoceptor antagonists; and
- (c) a combination of at least one A<sub>1</sub> adenosine receptor antagonist and at least one P<sub>2X</sub> purinoceptor antagonist;

wherein said compound is administered in an amount effective to treat the immune system disorder.

2. The method of Claim 1 wherein the disorder is selected from the group consisting of HIV infection, AIDS, and adenosine deaminase deficiency-dependent severe immunodeficiency disease (ADA SCID).

3. A method according to Claim 1, wherein the A<sub>1</sub> adenosine receptor antagonist is an antibody that binds the A<sub>1</sub> adenosine receptor.

4. A method according to Claim 1, wherein the P<sub>2X</sub> purinoceptor antagonist is an antibody that binds the P<sub>2X</sub> purinoceptor.

5. A method for preventing or delaying the onset of an immune system disorder in a subject in need of such treatment, comprising administering to said subject a compound selected from the group consisting of:

- (a) A<sub>1</sub> adenosine receptor antagonists;
- (b) P<sub>2X</sub> purinoceptor antagonists; and
- (c) a combination of at least one A<sub>1</sub> adenosine receptor antagonist and at least one P<sub>2X</sub> purinoceptor antagonist;

wherein said compound is administered in an amount effective to prevent or delay the onset of the immune system disorder that would occur in the absence of the administration.

6. The method of Claim 5 wherein the disorder is selected from the group consisting of HIV infection, AIDS, and adenosine deaminase deficiency-dependent severe immunodeficiency disease (ADA SCID).

7. The method according to Claim 5, wherein the A<sub>1</sub> adenosine receptor antagonist is an antibody that binds to the A<sub>1</sub> adenosine receptor.

8. A method according to Claim 5, wherein the P<sub>2X</sub> purinoceptor antagonist is an antibody that binds to the P<sub>2X</sub> purinoceptor.

9. A method for treating HIV infection or AIDS in a subject in need of such treatment, comprising administering to said subject a compound selected from the group consisting of:

- (a) A<sub>1</sub> adenosine receptor antagonists;
- (b) P<sub>2X</sub> purinoceptor antagonists; and
- (c) a combination of at least one A<sub>1</sub> adenosine receptor antagonist and at least one P<sub>2X</sub> purinoceptor antagonist;

wherein said compound is administered in an amount effective to treat the HIV infection or AIDS.

10. The method of Claim 9, wherein the treatment is carried out in conjunction with another treatment for HIV infection or AIDS.

11. A method according to Claim 9, wherein the A<sub>1</sub> adenosine receptor antagonist is an antibody that binds to the A<sub>1</sub> adenosine receptor.

12. A method according to Claim 9, wherein the P<sub>2X</sub> purinoceptor antagonist is an antibody that binds to the P<sub>2X</sub> purinoceptor.

13. A method for preventing or delaying the onset of HIV infection or AIDS in a subject in need of such treatment, comprising administering to said subject a compound selected from the group consisting of:

- (a) A<sub>1</sub> adenosine receptor antagonists;
- (b) P<sub>2X</sub> purinoceptor antagonists; and

(c) a combination of at least one A<sub>1</sub> adenosine receptor antagonist and at least one P<sub>2X</sub> purinoceptor antagonist; wherein said compound is administered in an amount effective to prevent or delay the onset of the HIV infection or AIDS that would occur in the absence of the administration.

14. A method according to Claim 13, wherein the A<sub>1</sub> adenosine receptor antagonist is an antibody that binds to the A<sub>1</sub> adenosine receptor.

15. A method according to Claim 13, wherein the P<sub>2X</sub> purinoceptor antagonist is an antibody that binds to the P<sub>2X</sub> purinoceptor.

16. A method for treating adenosine deaminase deficiency-dependent severe immunodeficiency disease (ADA SCID) in a subject in need of such treatment, comprising administering to said subject a compound selected from the group consisting of:

- (a) A<sub>1</sub> adenosine receptor antagonists;
- (b) P<sub>2X</sub> purinoceptor antagonists; and
- (c) a combination of at least one A<sub>1</sub> adenosine receptor antagonist and at least one P<sub>2X</sub> purinoceptor antagonist;

wherein said compound is administered in an amount effective to treat adenosine deaminase deficiency-dependent severe immunodeficiency disease (ADA SCID).

17. The method of Claim 16, wherein the treatment is carried out in conjunction with another treatment for adenosine deaminase deficiency-dependent severe immunodeficiency disease (ADA SCID).

18. A method according to Claim 16, wherein the A<sub>1</sub> adenosine receptor antagonist is an antibody that binds to the A<sub>1</sub> adenosine receptor.

19. A method according to Claim 16, wherein the P<sub>2X</sub> purinoceptor antagonist is an antibody that binds to the P<sub>2X</sub> purinoceptor.

20. A method for preventing or delaying the onset of adenosine deaminase deficiency-dependent severe immunodeficiency disease (ADA SCID) in a subject in need of such treatment, comprising administering to said subject a compound selected from the group consisting of:

- (a) A<sub>1</sub> adenosine receptor antagonists;
- (b) P<sub>2X</sub> purinoceptor antagonists; and
- (c) a combination of at least one A<sub>1</sub> adenosine receptor antagonist and at least one P<sub>2X</sub> purinoceptor antagonist;

wherein said compound is administered in an amount effective to prevent or delay the onset of the adenosine deaminase deficiency-dependent severe immunodeficiency disease (ADA SCID) that would occur in the absence of the administration.

21. A method according to Claim 20, wherein the A<sub>1</sub> adenosine receptor antagonist is an antibody that binds to the A<sub>1</sub> adenosine receptor.

22. A method according to Claim 20, wherein the P<sub>2X</sub> purinoceptor antagonist is an antibody that binds to the P<sub>2X</sub> purinoceptor.